## MEMORANDUM OF UNDERSTANDING

### BETWEEN

## VIRGIN GALACTIC, LLC

#### AND

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER

Pursuant to Section 203(c) of the National Aeronautics and Space Act of 1958, as amended, Virgin Galactic, LLC ("Virgin Galactic") and the National Aeronautics and Space Administration, as represented by Ames Research Center ("NASA/ARC"), enter into this Memorandum of Understanding ("MOU") confirming the intent of Virgin Galactic and NASA/ARC to negotiate in good faith to reach one or more definitive agreements on the matters set forth in this MOU. Neither party will be liable to the other for failure to reach any future definitive agreement or agreements.

## A. Purpose

The purpose of this MOU is for NASA/ARC and Virgin Galactic to explore the potential for collaborations in the following technical areas:

- Hypersonic vehicle concept maturation
- Potential use of unique NASA facilities and property for testing and operations
- Computational Fluid Dynamics
- Simulation support
- Thermal Protection System development
- Hybrid rocket motor development
- Potential use of NASA facilities e.g. the NASA AMES centrifuge

#### **B.** General Considerations

- 1. No Fees or Funding. Neither party will be required to provide the other party with any fees or funding in connection with any activities, definitive agreements, or other projects contemplated by this MOU.
- 2. No Obligation of Funds. All activities under or pursuant to this MOU are subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. This MOU is not a funding document and does not represent the obligation or transfer of funds.
- 3. Definitive Agreements. This MOU expresses the intent of **Virgin Galactic** and NASA/ARC to explore collaborations and pursue definitive agreements on matters set forth in this MOU. Specific collaborative research, as well as intellectual property matters, and other terms and conditions, will be subsequently negotiated as part of any such definitive agreements. The parties agree that this MOU is independent of any other contract between the United States

Government and **Virgin Galactic**. **Virgin Galactic** is not released hereby from its obligations under other existing contracts with the United States Government.

- 4. Confidential Information. No confidential or proprietary information will be disclosed except pursuant to a subsequently negotiated and signed definitive agreement. Both parties recognize that United States federal criminal law (Trade Secrets Act, 18 U.S.C. § 1905) specifically prohibits any U.S. Government employee from knowingly disclosing the trade secret information of a private entity.
- 5. Non-Disclosure. Neither party will disclose any confidential or proprietary information provided by or on behalf of the other party unless required by law or regulation or agreed in writing by them. This obligation may be superseded by confidentiality undertakings in a subsequently negotiated and signed definitive agreement.
- 6. Governing Law. This MOU shall be governed by United States federal law for all purposes including, but not limited to, determining the validity of this MOU, the meaning of its provisions and the rights, obligations and remedies of the parties.
- 7. No Assignment. Neither party shall assign this MOU to third parties without prior written approval of the other party.
- 8. Points of Contact. The personnel listed under this section are designated as the principal points of contact between the parties in the performance of this MOU.

|          | Virgin Galactic, LLC  |          | NASA/ARC                     |
|----------|-----------------------|----------|------------------------------|
| Name:    | Dr. Julia Tizard      | Name:    | Dr. Daniel J. Rasky          |
| Title:   | Operations Lead,      | Title:   | Director, Space Portal       |
|          | Virgin Galactic       |          | NASA Ames Research Center    |
| Tel. No: | (212) 497 9050        | Tel. No: | 650-604-1098                 |
| Address: | 65 Bleecker St        | Address: | M/S 555-3                    |
|          | 6 <sup>th</sup> floor |          | Moffett Field, CA 94035-1000 |
|          | New York              |          |                              |
|          | NY 10012              |          |                              |

- 9. Duration. The period of this MOU shall be for **two** years from the effective date below, unless termination of the MOU (a) occurs in accordance with the provisions of paragraph 10; or (b) is agreed to by both parties in writing.
- 10. Termination. Either party may terminate this MOU before the date provided in paragraph 9, by written notice to the other party thirty (30) days before the desired date of termination. The terminating party will not incur any liability to the other party for terminating this MOU.
- 11. Use of Parties Names and Initials: The parties agree to submit to each other for their approval all promotional and advertising material which uses the other party's name, intellectual property or initials prior to publication. Approval by NASA/ARC for use of its name or initials shall be based on applicable law (e.g. 42 U.S.C. 2459b, 2472(a) and 2473(c)(1); and 14 CFR

- 1221.100 et seq.) and policy governing the use of the words "National Aeronautics and Space Administration" and the letters "NASA."
- 12. Legal Effect. Apart from paragraph 5, 6, 11 and 12 of this letter (which are intended to create legally binding obligations), this letter shall not give rise to any legally binding rights or obligations. Any legal commitment with regard to the collaborations explored shall only arise pursuant to a subsequently negotiated and signed definitive agreement and related legal documents executed by the parties.

IN WITNESS WHEREOF, the parties do hereby execute this MOU effective as of the date of the last signature appearing below.

Virgin Galactic, LLC

National Aeronautics and Space Administration Ames Research Center

| Mr. Jonathan Peachey | S. Pete Worden                      |  |
|----------------------|-------------------------------------|--|
| Signature            | Signature                           |  |
| Virgin Galactic, LLC | Director, NASA Ames Research Center |  |
| Date 20 Fos 2007.    | 20 FOB 2007                         |  |